

Claims

- 1        1. A venous cannula comprising:
  - 2                an elongated flexible body member having a tubular wall defining a bore
  - 3                therein and having an intake end and a discharge end;
  - 4                a tip portion formed at said intake end and having a plurality of openings
  - 5                formed in said wall;
  - 6                a rigid helical support element embedded in said tubular wall and
  - 7                extending from said discharge end of said elongated body member to said tip portion; and
  - 8                a cage member fixed to the exterior of said end portion having a plurality
  - 9                of longitudinally stringers and a plurality of annular rings attached to stringers, said cage
  - 10               being disposed so that all of said intake apertures are covered by said cage member and
  - 11               remain open to the flow of blood.
- 1        2. The venous cannula of claim 1 wherein said rings and said stringers are of
- 2        relatively stiff materials.
- 1        3. The venous cannula of claim 1 wherein said stringers are on the outer surface
- 2        of said tip portion.
- 1        4. The venous cannula of claim 1 wherein said stringers and said rings are in a common
- 2        cylindrical plane.
- 1        5. The venous cannula of claim 1 wherein said stringers are on the outer surface of said
- 2        rings except said rings at the opposite ends of said cage, said stringers and said rings at
- 3        opposite ends of said cage being in a common cylindrical plane.

1        6. The venous cannula of claim 1 wherein additional set of apertures is formed in  
2        spaced relation to said tip portion and wherein an additional cage member is disposed to  
3        cover said second set of radial openings.

1        7. The venous cannula of claim 6 wherein claim 6 wherein said stringers of said  
2        additional cage members are on the outer surface of said tubular wall.

1        8. The venous cannula of claim 6 wherein said rings and stringers of said  
2        additional cage members are of relatively stiff materials.

1        9. The venous cannula of claim 6 wherein said stringers and said rings are in a  
2        common cylindrical plane.

3        10. The venous cannula of claim 6 wherein the stringers of said additional cage  
4        members has its stringers on the outer surface of said rings except said rings at opposite  
5        ends of said additional cage members.